EXECUTIVE OFFICER'S SUMMARY REPORT 9:00 a.m. February 11, 2004
North Coast Regional Water Board
Hearing Room
5550 Skylane Boulevard, Suite A
Santa Rosa, California

Item: 8

Subject: Sonoma County Water Agency, Mirabel Pumping Plant, (Petroleum Hydrocarbon

Cleanup Action), Forestville, Sonoma County, Recision of Waste Discharge Requirements and Monitoring and Reporting Program Order No. 92-139

WDID No. 1B92025RSON

DISCUSSION

On December 10, 1992, the Regional Water Quality Control Board adopted Waste Discharge Requirements and Monitoring and Reporting Program Order No. 92-139 for the Sonoma County Water Agency, Mirabel Pumping Station in Forestville, Sonoma County. The order regulated the remediation of impacted soil and groundwater contaminated as a result of an unauthorized release of hydraulic oil.

An in-situ, enhanced bioremediation system for groundwater cleanup was designed to accomplish the following: a) capture potentially contaminated groundwater down-gradient of the excavated spill area; b) treat the groundwater in a 1,200 gallon baffled concrete bioreactor; and c) re-inject the nutrient and bacteria amended water into the backfill of the excavation area. The system operated for approximately one year. Between September 1992 and October 1993 the extraction well was sampled seventeen times. Laboratory analytical results revealed concentrations of petroleum hydrocarbons as hydraulic oil, benzene, toluene, ethylbenzene and xylenes below laboratory reporting limits each sampling event.

Prior to the installation of the integrated bioremediation system, a total of approximately 150 cubic yards of contaminated soil was excavated from the release area. The soil was initially stockpiled on visqueen in an area 400 feet southwest of the excavated area. Shortly thereafter the soil was spread out in a one-foot-thick layer and was tilled once a week for eight weeks to allow for volatilization of the petroleum contaminants. In August 1993, Regional Water Board staff received a proposal from the Sonoma County Water Agency to remediate the stockpiled soils with nutrients and petroleum hydrocarbon degrading bacteria. The proposal was approved by staff.

In October 1996, approximately 120 cubic yards of soil with residual levels of hydraulic oil were disposed of at the Sonoma County Central Landfill. Confirmation samples collected from native soil beneath the stockpile area indicated a maximum concentration of 10 mg/kg petroleum hydrocarbons as hydraulic oil. Additional investigation and/or excavation of native soils was not required after the 1996 sampling event, and in 1997 a flood washed out the area where the soils had previously been stockpiled. The former stockpiled soil area is currently used as a

Item No. 8

percolation pond, providing water for Sonoma County Water Agency's Ranney Collector Well intake laterals.

In summary, the in-situ, enhanced bioremediation system has been de-commissioned and there is no residual groundwater contamination. The stockpiled petroleum contaminated soils have been properly disposed of offsite and the area where the soil had previously been stockpiled has been reconstructed as a percolation pond. Regional Water Board staff recommends rescinding Waste Discharge Requirements and Monitoring and Reporting Program Order No. 92-139 and requiring no further action at the release site.

The proposed Order rescinds existing Waste Discharge Requirements and Monitoring and Reporting Program Order No. 92-139.

PRELIMINARY STAFF

RECOMMENDATION: Adopt the tentative Order as proposed.

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